CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2018-02-14-02**	**Date: 16-02-18**
Customer	:	Assistant Executive Engineer, Dasarahalli Sub division, BBMP, Bangalore.	
Address	:	Dasarahalli Sub division, BBMP, Bangalore.	
Project Name	:	Improvements to roads and drains at 2nd main and 8th cross Manjunatha nagar in Ward no.14 Bagalagunte.	
Agency	:	Technical Manager West, KRIDL, Project Implementation Unit, No.280, 59th cross, 17th 'C' main road, 3rd 'Y' Block, Rajajinagar, Bangalore-560010.	
Customer Reference	:	BBMP/EE/DD/WO/83/2017-18	
Source of Sample	:	Sample supplied by Agency	
Sample Condition	:	Satisfactory	
Date of Receipt	:	14-02-2018	
Sample ID No	:	2018-02-14-02/01	
Type of Mix	:	BC-Plant (Bituminous Concrete)	
Date of test	:	14-02-18	
Oven Dry Weight	:	5000 Grams	

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	76	76	1.5	98.5	90-100
9.5	687	763	15.3	84.7	70-88
4.75	906	1669	33.4	66.6	53-71
2.36	687	2356	47.1	52.9	42-58
1.18	478	2834	56.7	43.3	34-48
0.6	489	3323	66.5	33.5	26-38
0.3	528	3851	77.0	23.0	18-28
0.15	467	4318	86.4	13.6	12-20
0.075	300	4618	92.4	7.6	4-10
PAN	382	5000	100	0.0	0

Note:
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬೆಂಗಳೂರು

CIVIL PRO BANGALORE Sig..... Date.....

FOR CIVIL Pro
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com
HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

Scanned by CamScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS CONCRETE

Lab ID	:	CP-RW-2018-02-14-02 **Date: 17-02-18**
Customer	:	Assistant Executive Engineer, Dasarahalli Sub division, BBMP, Bangalore.
Address	:	Dasarahalli Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains at 2nd main and 8th cross Manjunatha nagar in Ward no.14 Bagalagunte.
Agency	:	Technical Manager West, KRIDL, Project Implementation Unit, No.280, 59th cross, 17th 'C' main road, 3rd 'Y' Block, Rajajinagar, Bangalore-560010.
Customer Reference	:	BBMP/EE/DD/WO/83/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	14-02-2018
Sample ID No	:	2018-02-14-02/01
Type of Mix	:	BC (Bituminous Concrete)
Date of test	:	14-02-18

Table 500-16 : Physical Requirements fo Coarse Aggregate for Bituminous Concrete

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	12.4	Combined Flakiness & Elongation Index for BC is Maximum 35%	IS:2386 Part I
	Elongation Index	12.6		
Strength	Aggregate Impact Value	23.1	Maximum 24%	IS:2386 Part IV
Specific gravity	Specific gravity	2.63	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.26	Maximum 2%	IS:2386 Part III

Note:

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

FOR CIVIL Pro.,

R KARTHIK RECHAN
Authorized Signatory
Quallity Manager

CIVIL PRO Sig..... Date..... BANGALORE

ಸಾಯಿಲ್ ಇಂಜಿನಿಯರ್ ಅಧಿಕಾರಿಯವರ
ಬಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

End of Report

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

Scanned by CamScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2018-02-14-02**	**Date: 17-02-18**
Customer	:	Assistant Executive Engineer, Dasarahalli Sub division, BBMP, Bangalore.	
Address	:	Dasarahalli Sub division, BBMP, Bangalore.	
Project Name	:	Improvements to roads and drains at 2nd main and 8th cross Manjunatha nagar in Ward no.14 Bagalagunte.	
Agency	:	Technical Manager West, KRIDL, Project Implementation Unit, No.280, 59th cross, 17th 'C' main road, 3rd 'Y' Block, Rajajinagar, Bangalore-560010.	
Customer Reference	:	BBMP/EE/DD/WO/83/2017-18	
Source of Sample	:	Sample supplied by Agency	
Sample Condition	:	Satisfactory	
Date of Receipt	:	14-02-2018	
Sample ID No	:	2018-02-14-02/01	
Type of Mix	:	BC(Bitumenous Concrete)	
Date of test	:	14-02-18	

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.2	Minimum Retained Coating 95%
2	98.0	2.0		
3	98.0	2.0		

Note:
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

Page 1/1

****End of Report****

CIVIL PRO Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Scanned by CamScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2018-02-14-02** **Date: 17-02-18**
Customer	:	Assistant Executive Engineer, Dasarahalli Sub division, BBMP, Bangalore.
Address	:	Dasarahalli Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains at 2nd main and 8th cross Manjunatha nagar in Ward no.14 Bagalagunte.
Agency	:	Technical Manager West, KRIDL, Project Implementation Unit, No.280, 59th cross, 17th 'C' main road, 3rd 'Y' Block, Rajajinagar, Bangalore-560010.
Customer Reference	:	BBMP/EE/DD/WO/83/2017-18
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	14-02-2018
Sample ID No	:	2018-02-14-02/01
Type of Mix	:	BC (Bituminous Concrete)
Date of test	:	14-02-18

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.35	11.56	10KN(min)
2	Marshal flow at 60°C, mm	3.37	3.32	2-4
3	Percent air Voids	4.26	4.37	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.61	14.36	13-15
5	Percent Voids filled with Bitumen(VFB %)	70.37	71.36	65-75
6	Density, g/cc	2.26	2.24	–

Note:-
The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 30 days from the date of issue of test certificate

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

FOR CIVIL Pro,
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Page 1/1
End of Report

CIVIL PRO Sig..... Date..... BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Scanned by CamScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3

TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID	:	**CP-RW-2018-02-22-04**
Customer	:	**Date: 24-02-18**
Address	:	Assistant Executive Engineer, Dasarahalli Sub division, BBMP, Bangalore.
Project Name	:	Dasarahalli Sub division, BBMP, Bangalore.
Agency	:	Improvements to roads and drains at 2nd main and 8th cross Manjunatha nagar in Ward no.14 Bagalagunte.
Customer Reference	:	Technical Manager West, KRIDL, Project Implementation Unit, No.280, 59th cross, 17th 'C' main road, 3rd 'Y' Block, Rajajinagar, Bangalore-560010.
Source of Sample	:	BBMP/EE/DD/WO/83/2017-18
Date of Receipt	:	Sample supplied by Agency
Sample ID No	:	22-02-2018
Type of Mix	:	2018-02-22-04/01
Date of test	:	BC (Bituminous Concrete)
		22-02-18

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	504	505
2	Weight of the sample After extraction	B	473	474
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	6.15	6.14
4	Average percentage	%	6.1	

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

Sig.....
Date.....
CIVIL PRO BANGALORE

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Scanned by CamScanner

CIVIL PRO
AN ISO 9001 : 2008 COMPANY &NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2005
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST REPORT ON BITUMEN

Format No: CP/TF/01

Lab ID	:	CP-2018-02-07-08
Customer	:	Assistant Executive Engineer, Dasarahalli Sub division, BBMP, Bangalore. **Date: 09-02-18**
Address	:	Dasarahalli Sub division, BBMP, Bangalore.
Project Name	:	Improvements to roads and drains at 2nd main and 8th cross Manjunatha nagar in Ward no.14 Bagalagunte.
Agency	:	Technical Manager West, KRIDL, Project Implementation Unit, No.280, 59th cross, 17th 'C' main road, 3rd 'Y' Block, Rajajinagar, Bangalore-560010.
Customer's Reference	:	BBMP/EE/DD/WO/83/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	07-02-18
Sample ID No	:	2018-02-07-08/01
Sample Type	:	Bitumen
Reference to BIS codes	:	IS: 1201-1220(1978) (Reaffirmed-2004)
Date of test	:	07-02-18

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	63	60 to 70
2	Softening Point, °C	45.6	Min. 40°C
3	Ductility, cm	86	Min. 75cm
4	Flash point, °C	259	Min. 220°C
	Fire point, °C	279	

Note:

The results pertain to the samples received and tested.
All information furnished by Customer/Representative
Any correction in the report will make this report invalid
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರ
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
ಬೆಂಗಳೂರು

CIVIL Pro Sig..... Date..... BANGALORE

FOR CIVIL Pro.

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | GEO-TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

Scanned by CamScanner